92/DFW

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Group Art Unit: 2634
Examiner: C. Pathak Sudhanshu

In re PATENT APPLICATION of:

Applicant : Noboru YAMASHITA
Serial No. : 09/803,049
Filed : March 12, 2001
For : RECEIVER FOR SPECTRUM SPREADING COMMUNICATION SYSTEM
Attorney Ref. : SATA 012

LETTER

November 12, 2004

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Sir:

The Notice of Allowance (mailed November 5, 2004) has been received. Attached to the Notice of Allowance was a copy of the first page of a substitute specification, with a handwritten note. Since it would appear that this attachment may have been included by mistake, and also that the attachment may be needed during printing of the patent, it is being returned herewith.

FEE ENCLOSED:$ Please charge any further fee to our Deposit Account No. 18-0002

Respectfully submitted,

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AW:rw

SUBSTITUTE SPECIFICATION

RECEIVER FOR SPECTRUM SPREADING COMMUNICATION SYSTEM

BACKGROUND OF THE INVENTION

[0001] 1. Technical Field of the Invention

The present invention relates to a spread spectrum communication system suited for a mobile communication system such as a cellular phone system, and in particular to a spread spectrum communication system of the direct sequence type that spreads and despreads a signal to be transmitted, using a spread code such as a pseudo noise sequence (PN sequence.)

[0002] 2. Related Art

In a spread spectrum mobile communication system of the direct sequence type, a receiver receives a plurality of signals from a transmitter via a plurality of different paths existing between the receiver and the transmitter. The receiver also acquires and tracks several better signals among the received signals, thus combining the tracked signals to demodulate the combined signal.

However, during an intermittent transmission in which the transmission power of each of the plurality of signals is reduced to save power consumption, there may be a plurality of noises larger than the desired signals, so the receiver may acquire and track the noises instead of the desired signals. Consequently, after resuming the transmission after a pause in the intermittent transmission, the receiver cannot demodulate the desired signals until the receiver newly acquires and tracks the desired signals instead of the noises.

[0003] SUMMARY OF THE INVENTION

It is therefore a principal object of the present invention to avoid the disadvantages of the prior art.